

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:)	Confirmation No. 5781
)	
KOYAMA et al)	Group Art Unit: 1794
)	
Serial No.: 10/535,242)	Examiner: Chevalier, Alicia Ann
)	
Filed: May 18, 2005)	
)	
For: FINGERPRINT EASILY ERASABLE FILM)	

REPLY BRIEF

Commissioner for Patents
P.O. Box 14501
Alexandria, VA 22313-1450

Sir:

This is in response to the Examiner's Answer dated June 28, 2010.

1. The Examiner Misinterprets Another Teaching of Takahashi

At page 8, in the second full paragraph, of the Examiner's Answer, the Examiner newly invokes another teaching of Takahashi where she writes: "Takahashi later discloses that the wet/surface tension is associated with the surfaces ability to adhere substances to the surface (col. 9, lines 43-57)." The Examiner's assertion is important because it relates to the issue of whether or not the Examiner has given any reason for combining the reference teachings in the manner she has adopted.

The actual teaching at column 9, lines 45 to 48, of Takahashi et al reads: "If the critical surface tension of the cured coating film is less than 20 dyne/cm, the adhesion of a printing ink to the coating film may be decreased." The corollary of

the quoted statement is that if the wet tension is more than 20 dyne /cm an increase in the “ability to adhere substances to the surface” (the Examiner’s wording at page 8) is to be expected. Of course greater adhesion of a fingerprint to the film surface is the opposite of the effect sought by Amimori et al (and by Appellant’s invention). Thus, the teaching at column 9 of Takahashi et al referenced by the Examiner, leads away from, not toward, the allegedly obvious modification of Amimori et al.

2. Appellant is Under No Burden to “specifically show how modifying Amimori et al would negatively impact the invention of Amimori.”

In the third paragraph at page 7 of the Examiner’s Answer, with regard to Appellant’s argument that the teaching of Amimori et al lead away from the allegedly obvious modification of Amimori et al, the Examiner invokes a burden of proof unrecognized in our law where she writes: “Appellant has failed to specifically show how modifying Amimori to have a wet tension of 25 mN/m or higher as taught by Takahashi would negatively impact the invention of Amimori.” Appellant is under no burden to substantiate what the reference teaches.

Under heading A.2 at pages 5-7 of Appellant’s main brief Appellant argued that the only teaching of Amimori et al of any relevance to stain removal, i.e., at column 31, lines 1-31, which teaching that Examiner relies upon as basis for combination with the Takahashi reference (see page 4 and, especially, page 8, lines 3 and 4, of the Examiner’s answer), leads away from the allegedly obvious modification of Amimori et al. At column 31, lines 1-31, Amimori et al report the results of tests showing that a material presenting low surface tension (sample 24 - a fluorocarbon polymer) allowed a stain to “easily be wiped out.” A teaching away

from a claimed invention is evidence of non-obviousness and places no burden on appellant to “specifically show how modifying Amimori would negatively impact the invention of Amimori.”

In Appellant’s brief, in the paragraph bridging pages 7 and 8, under the heading “2. The Allegedly Obvious Modification of Amimori et al would change the Principle of Operation of the Reference [Amimori et al],” Appellant responds to the Examiner’s statement, “Also, Applicant has not shown how the use of a higher wet tension material in Amimori would alter the invention of Amimori” (top of page 6, final rejection), as follows:

The Examiner’s second point seems to ignore the data at column 31 of Amimori et al on which the Examiner originally relied. The results of tests reported by Amimori et al at column 31, lines 17-21, demonstrate one reason why the extremely low surface tension fluorine-containing is [sic., compounds are] preferred as taught at column 13, lines 58-65.”

Appellant’s argument was and is that (1) the demonstration of ease of stain removal from the “low refractive index layer” of sample 24, a fluorocarbon polymer which provides low wet tension (see the evidence of record), and (2) the teaching of a preference for fluorine containing compounds for the “low refractive index layer” (column 13, lines 58-60) are evidence that the operative principle of Amimori et al for stain removal (which the Examiner equates with “fingerprint easily erasable”) is low wet tension, consistent with appellant’s description of the prior art approach, at page 1, line 22 to page 2, line 1 of appellant’s specification.

Contrary to that prior art approach of Amimori et al, Appellant’s specification, at page 2, lines 2-7 and 12-15, teaches that, **for a matted surface**, a higher wet tension eases removal of fingerprints, i.e., the opposite of the prior art operative

principle. This is evidenced by the working examples of Appellant's specification, the results of which are summarized in table 1, page 20. As shown in table 1, comparative examples 1 and 2, which presented surfaces having wet tensions of "not more than 22.6" (and therefore outside of the scope of claim 1), much more strongly resisted fingerprint removal as compared with examples 1-7 within the scope of claim 1. Comparative example 3 was a film having a wet tension of 25.4 (within the scope of claim 1) but had little matting, i.e., a ten point mean roughness Rz of 0.02 (well below the 0.2 lower limit of claim 1).

Because the Examiner's hypothetical modification of Amimori et al would change the operative principle for stain removal in Amimori et al, the combined prior art teachings do not create a *prima facie* case for obviousness. Quoting from MPEP §2143.01:

"If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)."

With regard to this latter argument also, the Examiner again invokes the same conjured burden of proof where she writes, at the top of page 8 of the Examiner's answer: "Again, Appellant has failed to specifically show how modifying Amimori to have a wet tension of 25 mN/m or higher as taught by Takahashi would negatively impact the invention of Amimori." However, this latter argument of Appellant, likewise, imposes no burden on the Appellant to "specifically show how modifying Amimori would negatively impact the invention of Amimori." Again, our law places no burden on Appellant to substantiate what the prior art teaches.

3. The Fluorocarbon Polymer of Amimori et al Sample 21 is the **Only** Film Described by Amimori et al as Providing Ease of Stain Removal (or Fingerprint removal)

In the Examiner's answer, the Examiner repeatedly emphasizes that fluorocarbon polymers are described by Amimori et al as merely preferred. However, the teachings of Amimori et al regarding fluorocarbon polymers are more relevant than represented by the Examiner because the description of the fluorocarbon polymer film (sample 21) at column 31, lines 17 and 18, is the only teaching of Amimori et al of a film providing for ease of stain removal and is the basis for the Examiner's argument regarding the propriety of combining the references (page 8, lines 3 and 4, of the Examiner's answer).

4. The Examiner Misrepresents Sections VII.A.1.A and VII.A.1.B of Appellant's Brief.

In the last paragraph at page 6 and the first paragraph of page 7 of the Examiner's answer, the Examiner characterizes the above sections of Appellant's main brief as "arguments against the references individually." However the above sections are presented under heading VII.A.1 which correctly characterizes the content of those sections as "The Differences Between the Prior Art and the Claimed Invention." Thus, these sections present facts in answer to the second factual inquiry required, as a basis for every decision regarding obviousness, by *Graham v. John Deere Co.*, 383 U.S.1 (1966) and by *KSR International Co. V. Teleflex Inc.*, 550 U.S. 398 (2007).

5. The Rejection of Claims 6, 11, and 13 (and 12 ?) for Obviousness Over Amimori et al in view of Takahashi et al and further in view of Hasuo et al.

If the Board finds that claim 1 is patentable over the combination of Amimori et al and Takahashi et al, then there is no need to further address Appellant's additional argument regarding the rejection of claims 6, 11 and 13, all of which depend indirectly from claim 1.

At page 10 of appellant's main brief, Appellant argued: "Further, because Hasuo et al is directed to a hydrophilic coating, Hasuo et al is neither relevant to nor properly combinable with the teachings of Amimori et al relating to use of silicon and fluorine containing resins as a low refractive index layer 3." Perhaps the argument could have been better stated in terms of the impropriety of taking the teachings of Hasuo et al as suggestive of modification of the outer, stain-resistant fluorocarbon film of sample 21 of Amimori et al. In any event, the Examiner's answer to the argument is another example of invocation of a non-existent burden of proof:

"Appellant has failed to specifically show how modifying Amimori to use two kinds of matting agents having different average particle diameters as taught by Hasuo would negatively impact the invention of Amimori nor has Appellant specifically shown why Hasuo is improper to combine with Amimori based on the preferred materials." [page 10, Examiner's Answer]

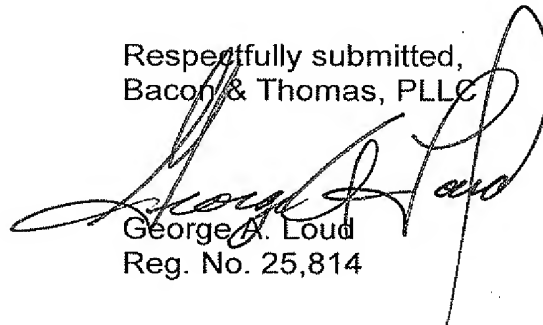
At column 1, lines 22-34, Hasuo et al describe the problem of fogging as water vapor which condenses as droplets "rather than as a water layer." As taught in the abstract of Hasuo et al, their solution to the problem is a hydrophilic layer which "has peaks on its surface" and which "comprises hydrophilic metal oxide particles and a hydrophilic inorganic amorphous material" [Emphasis added]. Such teachings, clearly limited to hydrophilic materials, would have no apparent relevance to any high wet tension (hydrophobic) material disclosed by Amimori et al or

elsewhere in the prior art.

Also, note that the outer, low refractive index layer 3, 43 of Amimori et al, exemplified by sample 21, contains no particulate matting agent (the matting agent 4, 44 is contained in the hard coat layer 2, 42 - see column 10, lines 42, 43 and Fig. 2 of Amimori et al) and that the Examiner has given no reason why it would have been obvious to incorporate any particulate matting agent into the outer layer 3, 43 of Amimori et al, as would be required to satisfy the limitations of claims 6 and 11-13.

In conclusion, it is again submitted that the record here does not establish a *prima facie* case for obviousness of any of the claims presented on appeal and, accordingly, the rejections set forth in the final rejection should be reversed.

Respectfully submitted,
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Dated: August 24, 2010

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